

What is claimed is:

FIGS 11-15

102.6 Sub
Welds 1, 2, 3, 4, 5, 6, 7, 8

Subcomb

A tonneau cover apparatus for removably attaching a flexible cover about a perimeter of a cargo box and tailgate of a pickup truck, the tonneau cover apparatus comprising:

4

5 a support frame, the support frame removably attached about the cargo box of the
6 pickup truck;

7

8 an end plate engagement member, the end plate engagement member being
9 attached to the support frame, the end plate engagement member configured to engage
10 and receive a portion of the end plate as the end plate is translated and pivoted into and
11 out of a fixed stretching position in which a tension is placed upon the flexible cover;

em

12

13 ~~an end plate~~, the end plate being attached to an end of a flexible cover, the end
14 plate configured to cooperatively engage and pivot with respect to the end plate
15 engagement member and into and out of the fixed stretching position wherein the flexible
16 cover can be correspondingly be tensed and relaxed; the end plate having a radial
17 engaging surface and the end plate engagement member having a ⁶⁴² receiving surface which
18 engages the radial engaging surface when the end plate pivots into the fixed stretching
19 position.

2. The tonneau cover apparatus of claim 1, wherein the end plate engagement
2 member has a radial receiving surface which engages the radial engaging surface when
3 the end plate pivots into the fixed stretching position.

does not further
limit CL 1
E 17-PA

1 3. The tonneau cover apparatus of claim 1, further including a locking member, the
2 locking member operatively connected to the end plate rearward of the end plate
3 engagement member when the end plate is in the fixed stretching position; the locking
4 member being moveable between a first position and a second position, wherein the

5 locking member prevents the end plate from being disengaged from the fixed stretching
6 position when the locking member is in the first position, and wherein the end plate can
7 be disengaged from the fixed stretching position when the locking member is in the
8 second position.

1 4. The tonneau cover apparatus of claim 3, wherein the perimeter of the cargo box
2 includes a forward end and two opposing sidewalls; the support frame includes two
3 opposing side rails, one of which is secured to each of the respective opposing side walls;
4 the tonneau cover apparatus further including a second end plate engagement member;
5 each of the end plate engagement members being attached to one of the two side rails
6 attached to the two opposing side walls; wherein the side rails each have an inwardly
7 extending flange portion and the locking member includes a finger portion, the finger
8 portion of the locking member being positioned below the respective inwardly extending
9 flange portion when the locking member is in the first position such that the end plate
10 cannot be disengaged from the end plate engagement member, because the finger portion
11 is restrained by the inwardly extending flange, the finger portion of the locking member
12 being removed from the inwardly extending flange portion when the locking member is
13 moved from the first position to the second position such that the end plate can be
14 disengaged from the end plate engagement member when the locking member is in the
15 second position.

1 5. The tonneau cover apparatus according to claim 4, wherein the locking member
2 includes an upper portion which is slidably retained within the end plate, and the finger
3 portion is spaced apart from the upper portion and extends outwardly beyond the main
4 body of the upper portion.

1 6. The tonneau cover apparatus according to claim 5, wherein the end plate includes
2 a channel having a cross-sectional shape which is smaller at the bottom and larger at the
3 top so that it has a generally "T" shaped configuration.

Sub
B2

1. A tonneau cover apparatus for removably attaching a flexible cover about a perimeter of a cargo box and tailgate of a pickup truck, the tonneau cover apparatus comprising:

4

5 a support frame, the support frame removably attached about the cargo box of the
6 pickup truck;

7

8 an end plate engagement member, the end plate engagement member being
9 attached to the support frame, the end plate engagement member configured to engage
10 and receive a portion of ⁱⁿ the end plate as the end plate is translated and pivoted into and
11 out of a fixed stretching position in which a tension is placed upon the flexible cover;

12

13 *wherein* an end plate, the end plate being attached to an end of a flexible cover, the end
14 plate configured to cooperatively engage and pivot with respect to the end plate.
15 engagement member and into and out of the fixed stretching position wherein the flexible
16 cover can be correspondingly be tensed and relaxed; the end plate engagement member
17 having a radial receiving surface and the end plate having a radial engaging surface
18 which engages the radial receiving surface when the end plate pivots into the fixed
19 stretching position.

the only difference from
claim 1 is the
end plate before
engagement

1 8. The tonneau cover apparatus of claim 7, further including a locking member, the
2 locking member operatively connected to the end plate rearward of the end plate
3 engagement member when the end plate is in the fixed stretching position; the locking
4 member being moveable between a first position and a second position, wherein the
5 locking member prevents the end plate from being disengaged from the fixed stretching
6 position when the locking member is in the first position, and wherein the end plate can
7 be disengaged from the fixed stretching position when the locking member is in the
8 second position.

same as
claim 3

Sub
A2

9. The tonneau cover apparatus of claim 7, wherein the perimeter of the cargo box
2 includes a forward end and two opposing sidewalls; the support frame includes two

should
depend on
cl 3

no
out

3 opposing side rails, one of which is secured to each of the respective opposing side walls;
4 the tonneau cover apparatus further including a second end plate engagement member;
5 each of the end plate engagement members being attached to one of the two side rails
6 attached to the two opposing side walls; wherein the side rails each have an inwardly
7 extending flange portion and the locking member includes a finger portion, the finger
8 portion of the locking member being positioned below the respective inwardly extending
9 flange portion when the locking member is in the first position such that the end plate
10 cannot be disengaged from the end plate engagement member, because the finger portion
11 is restrained by the inwardly extending flange, the finger portion of the locking member
12 being removed from the inwardly extending flange portion when the locking member is
13 moved from the first position to the second position such that the end plate can be
14 disengaged from the end plate engagement member when the locking member is in the
15 second position.

1 10. The tonneau cover apparatus according to claim 7, wherein the locking member
2 includes an upper portion which is slidably retained within the end plate, and the finger
3 portion is spaced apart from the upper portion and extends outwardly beyond the main
4 body of the upper portion.

should depend
on cl 9

1 11. The tonneau cover apparatus according to claim 7, wherein the end plate includes
2 a channel having a cross-sectional shape which is smaller at the bottom and larger at the
3 top so that it has a generally "T" shaped configuration.

should depend
on cl 10

12. A tonneau cover apparatus for removably attaching a flexible cover about a top of
1 a perimeter of a cargo box of a pickup truck, the perimeter of the cargo box including a
2 forward end, two opposing sidewalls and a tailgate, the tailgate being positioned rearward
3 of the forward end and having an open position and a closed position, the flexible cover
4 having first and second ends, the tonneau cover apparatus comprising:
5

6
7 a support frame including two opposing side rails and a pair of end plate
8 engagement members, one of which is secured to each of the respective opposing side

9 rails rearward of the forward end, the support frame being removably attached to the
10 cargo box of the pickup truck;

11
12 an end plate attached to the second end of the flexible cover, the end plate
13 configured to cooperatively engage and pivot with respect to each of the respective end
14 plate engagement members; wherein the end plate engagement members cooperate to
15 engage the end plate when the first end of the flexible cover is operatively connected to
16 the support frame forward of the respective engagement members, such that the end plate
17 can pivot into and out of a fixed stretching position wherein the flexible cover is stretched
18 to place a tension on the flexible cover; the end plate having a radial engaging surface
19 and each of the end plate engagement members having a receiving surface which engages
20 a portion of the radial engaging surface when the end plate pivots into the fixed stretching
21 position; and

22
23 a locking member, the locking member operatively connected to the end plate
24 rearward of the each of the end plate engagement members when the end plate is in the
25 fixed stretching position and movable between a first position and a second position
26 when the end plate is in the fixed stretching position; wherein the locking member
27 prevents the end plate from being disengaged from the fixed stretching position when the
28 locking member is in the first position, and wherein the end plate can be disengaged from
29 the fixed stretching position when the locking member is in the second position.

1 13. The tonneau cover apparatus of claim 12, wherein the end plate engagement
2 members have radial receiving surfaces which engage portions of the radial engaging
3 surface when the end plate pivots into the fixed stretching position.

does not further limit

1 14. The tonneau cover apparatus of claim 13, wherein the perimeter of the cargo box
2 includes a forward end and two opposing sidewalls; the support frame includes two
3 opposing side rails, one of which is secured to each of the respective opposing side walls;
4 the tonneau cover apparatus further including a second end plate engagement member;
5 each of the end plate engagement members being attached to one of the two side rails

6 attached to the two opposing side walls; wherein the side rails each have an inwardly
7 extending flange portion and the locking member includes a finger portion, the finger
8 portion of the locking member being positioned below the respective inwardly extending
9 flange portion when the locking member is in the first position such that the end plate
10 cannot be disengaged from the end plate engagement member, because the finger portion
11 is restrained by the inwardly extending flange, the finger portion of the locking member
12 being removed from the inwardly extending flange portion when the locking member is
13 moved from the first position to the second position such that the end plate can be
14 disengaged from the end plate engagement member when the locking member is in the
15 second position.

1 15. The tonneau cover apparatus according to claim 14, wherein the locking member
2 includes an upper portion which is slidably retained within the end plate, and the finger
3 portion is spaced apart from the upper portion and extends outwardly beyond the main
4 body of the upper portion.

1 16. The tonneau cover apparatus according to claim 15, wherein the end plate
2 includes a channel having a cross-sectional shape which is smaller at the bottom and
3 larger at the top so that it has a generally "T" shaped configuration.

Att'y A25